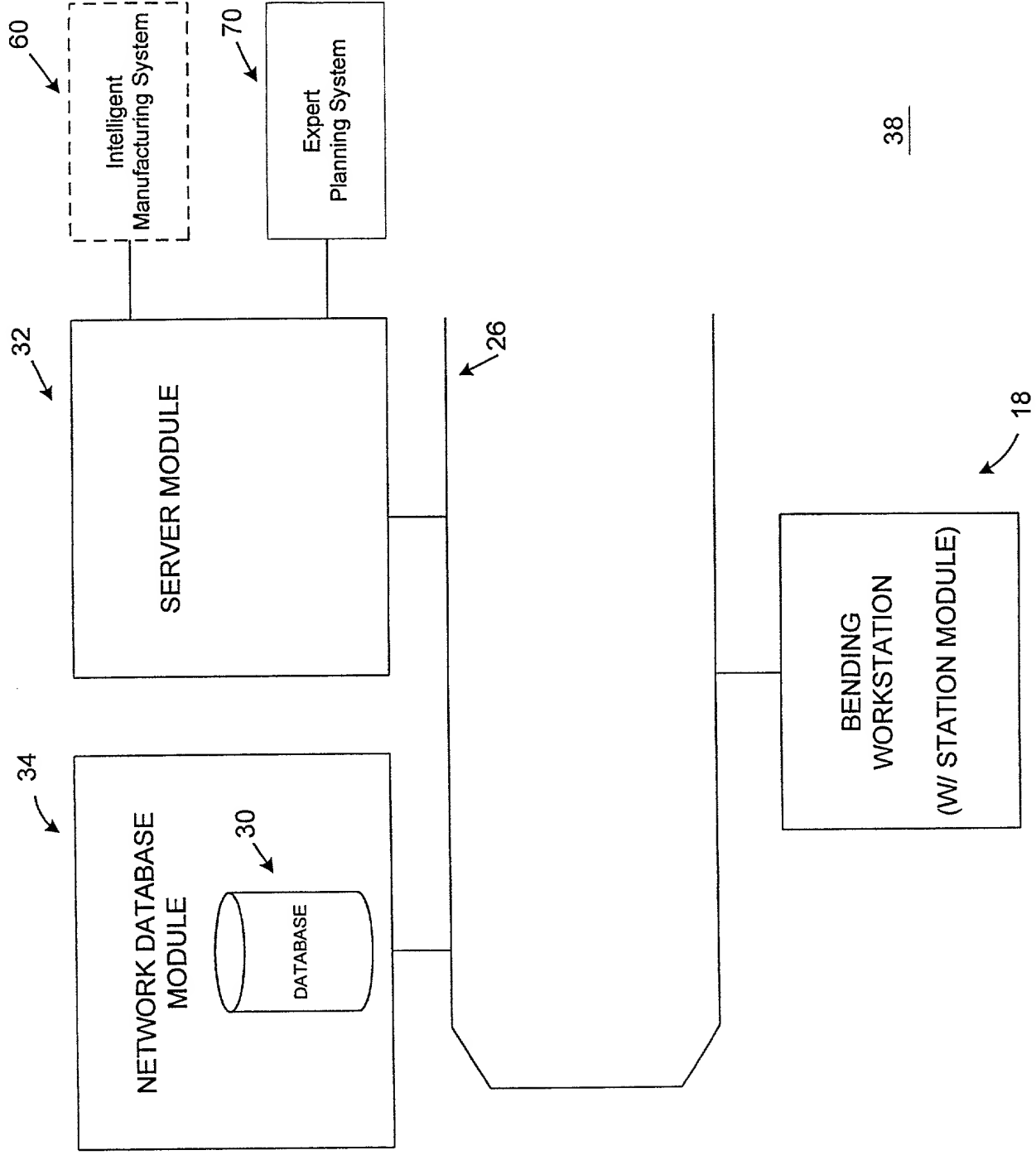


FIG. 1A



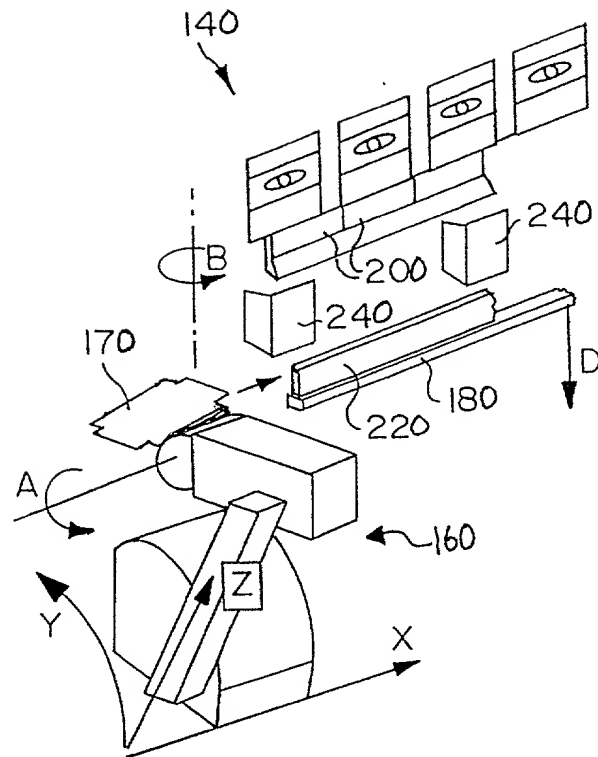


FIG. 2

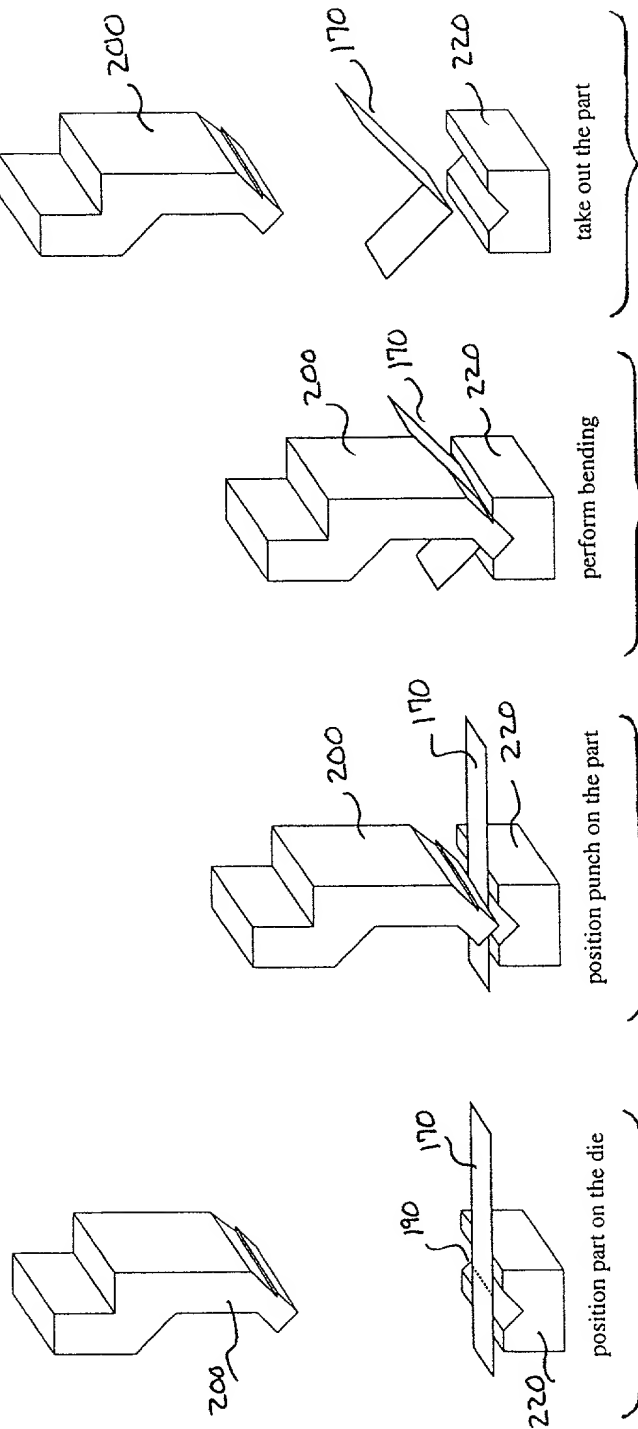


FIG. 3A

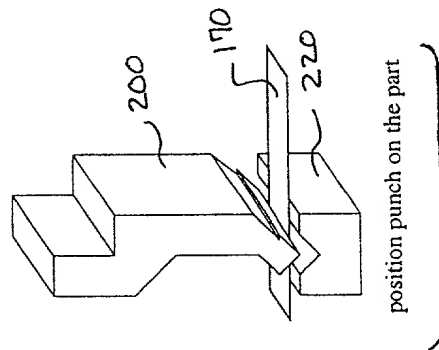


FIG. 3B

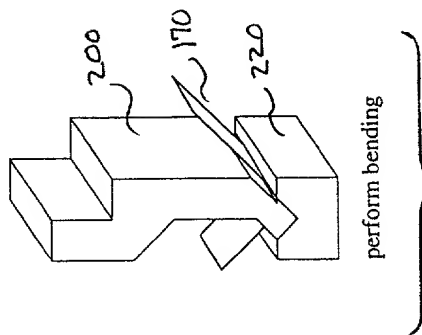


FIG. 3C

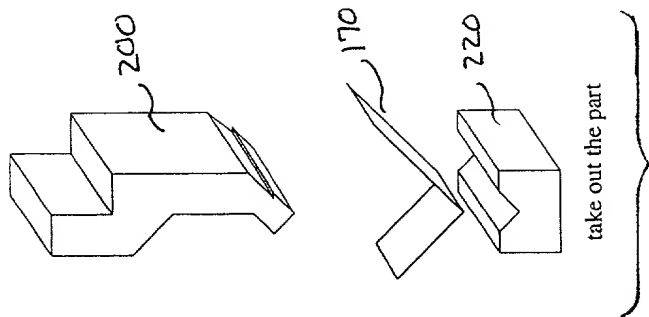


FIG. 3D

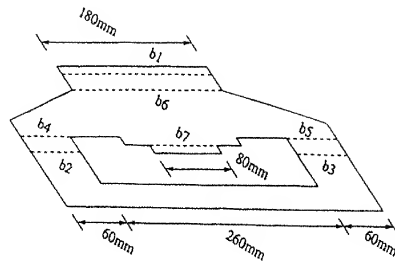


FIG. 4A

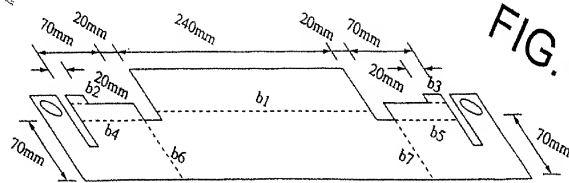
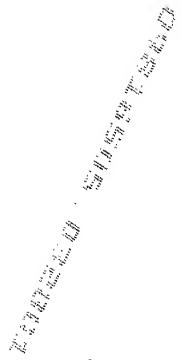
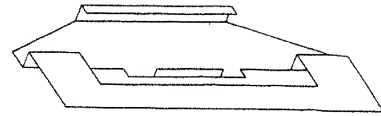


FIG. 4B

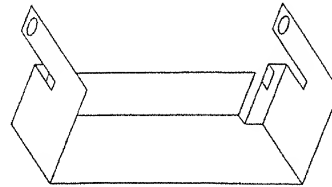


FIG. 4C

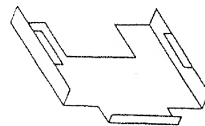
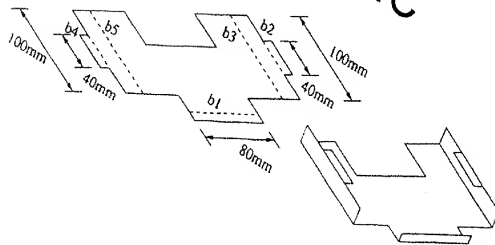


FIG. 5A

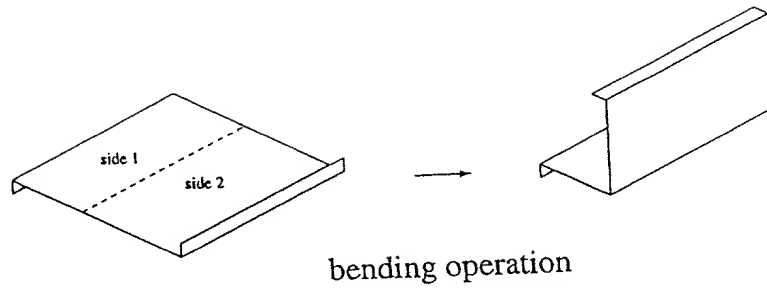


FIG. 5B

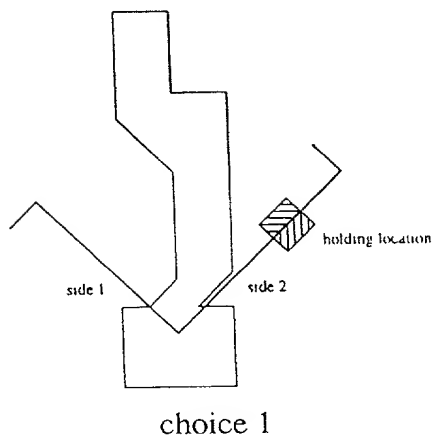


FIG. 5C

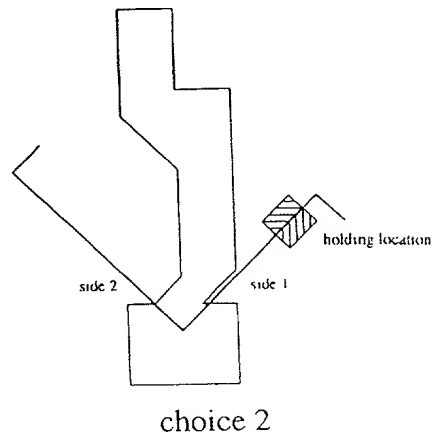
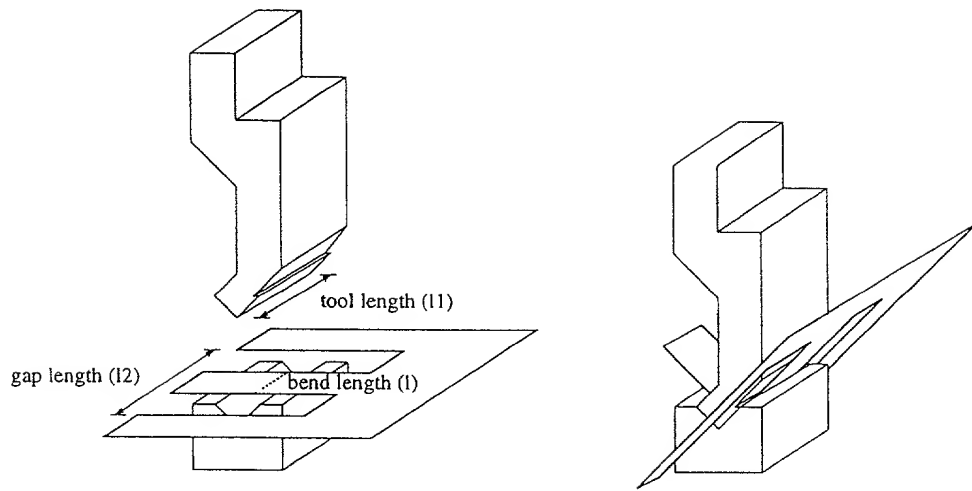
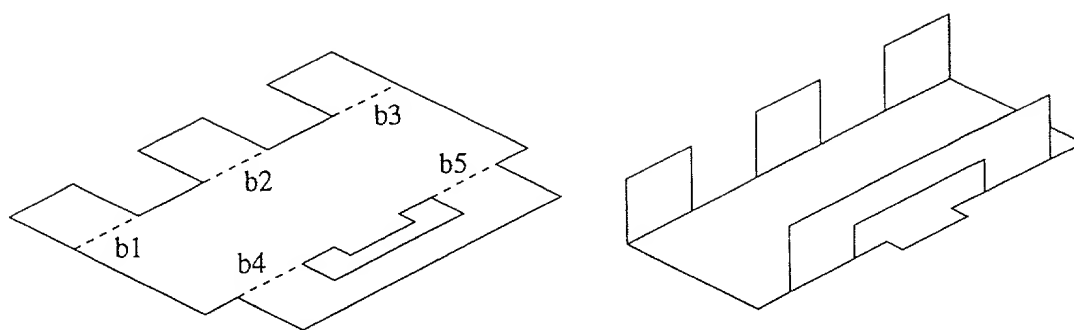


FIG. 6



An example of setup constraint

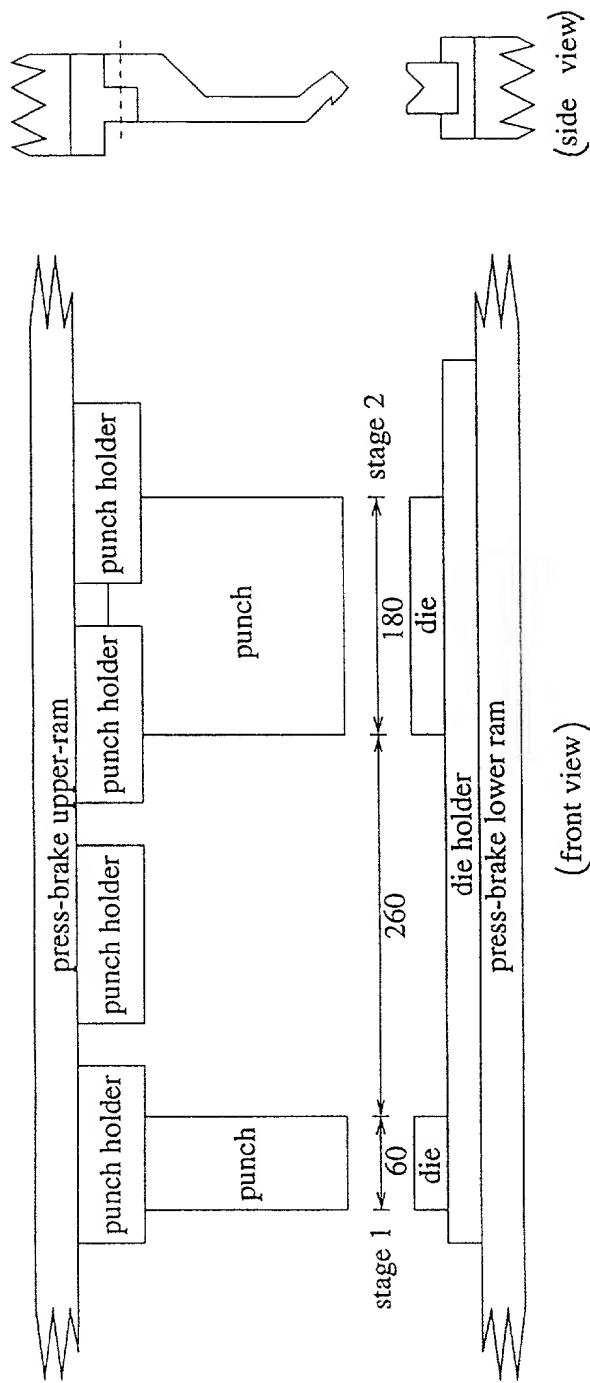
FIG. 7



Colinear bends



FIG. 8



A bending press-brake setup

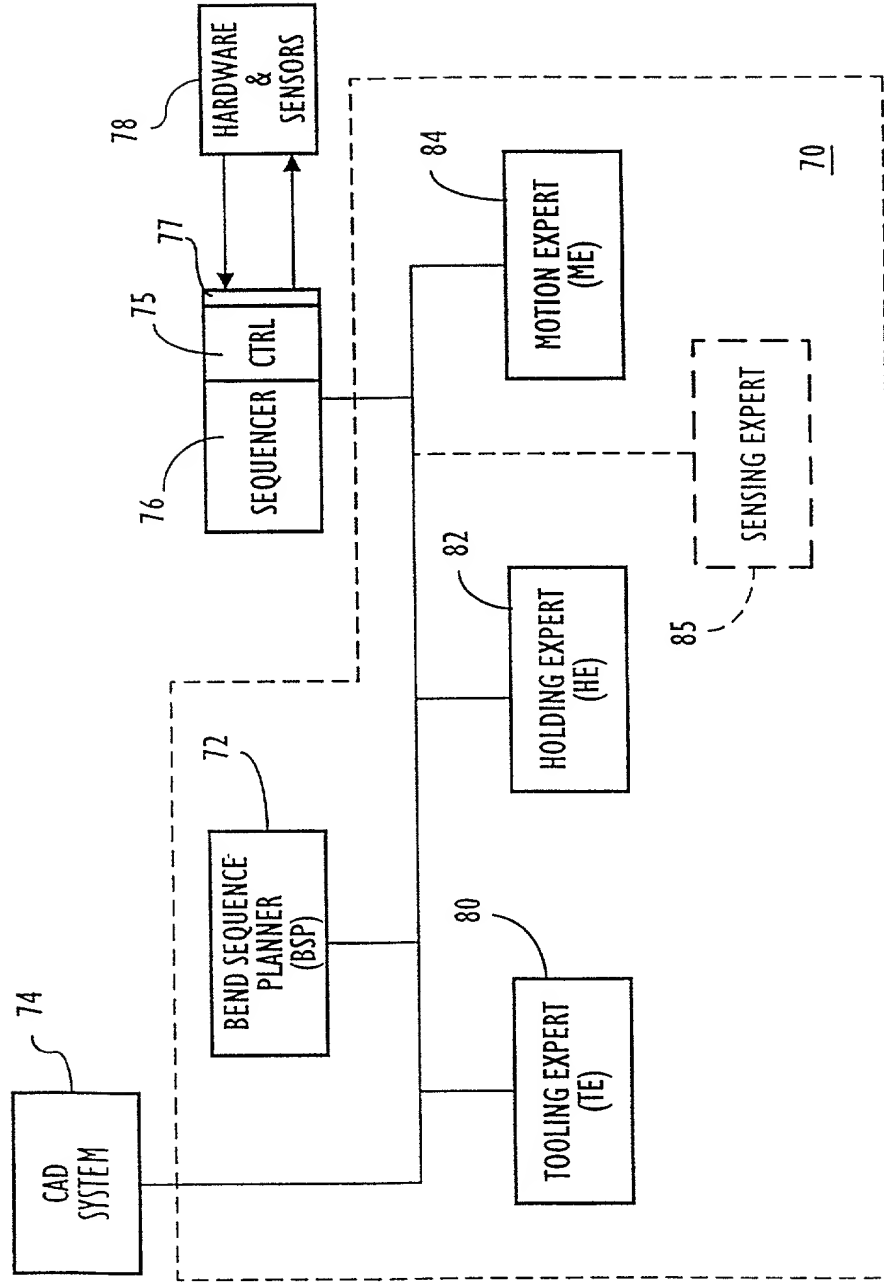


FIG. 9A

FIG. 9B

FIG. 9B

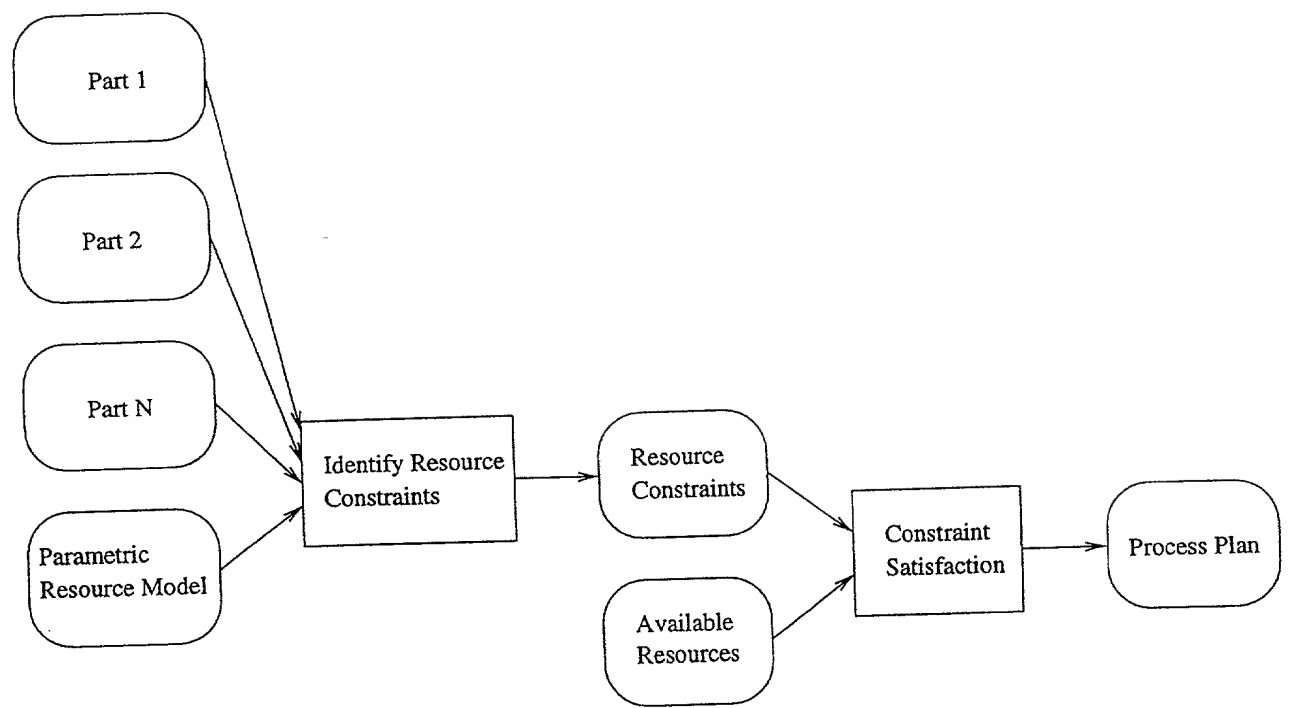
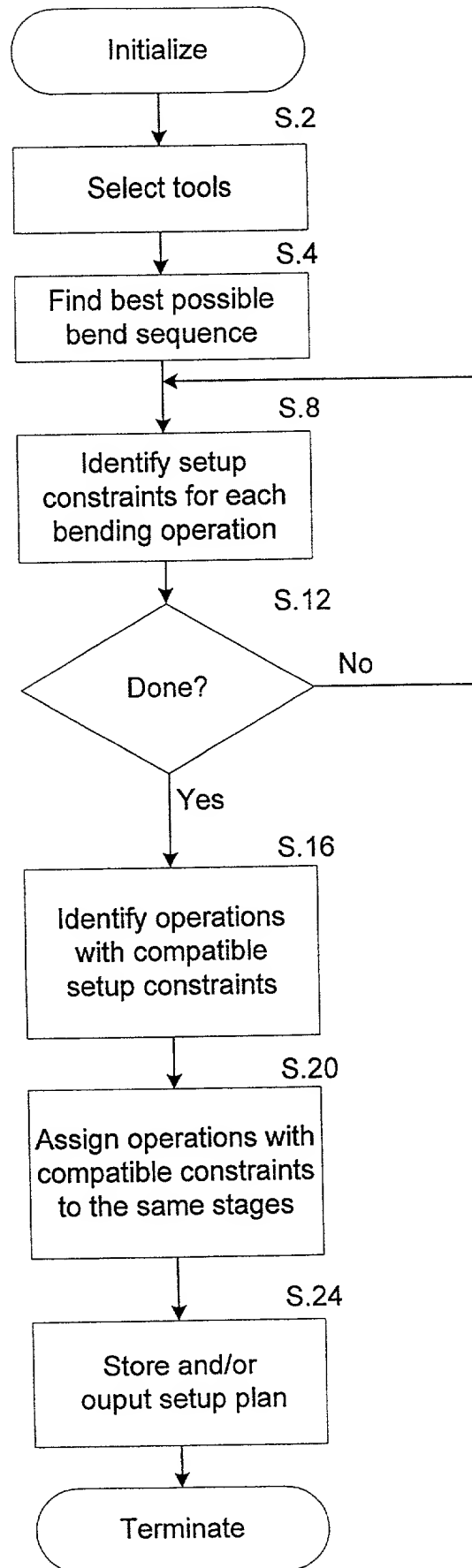


FIG.10



Generating setup constraints

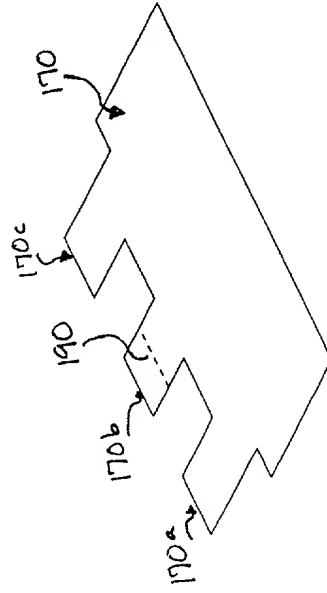


FIG. 11A

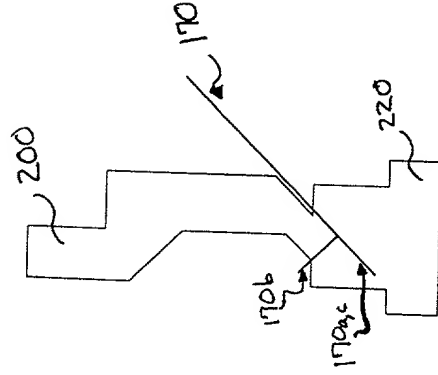


FIG. 11B

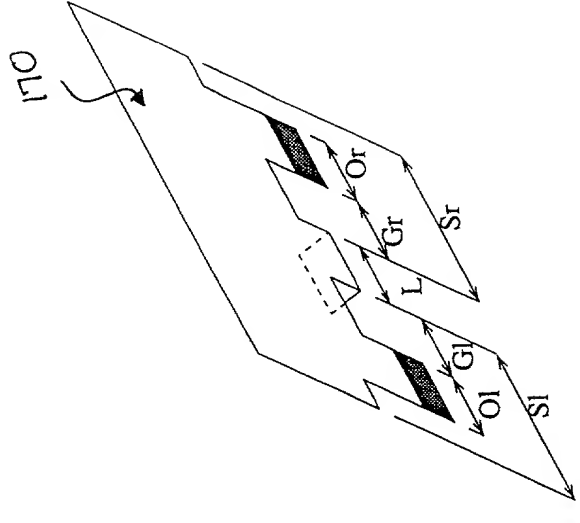
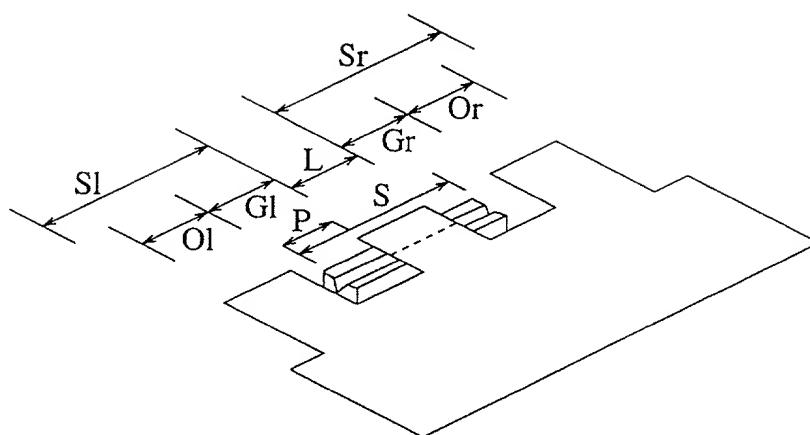


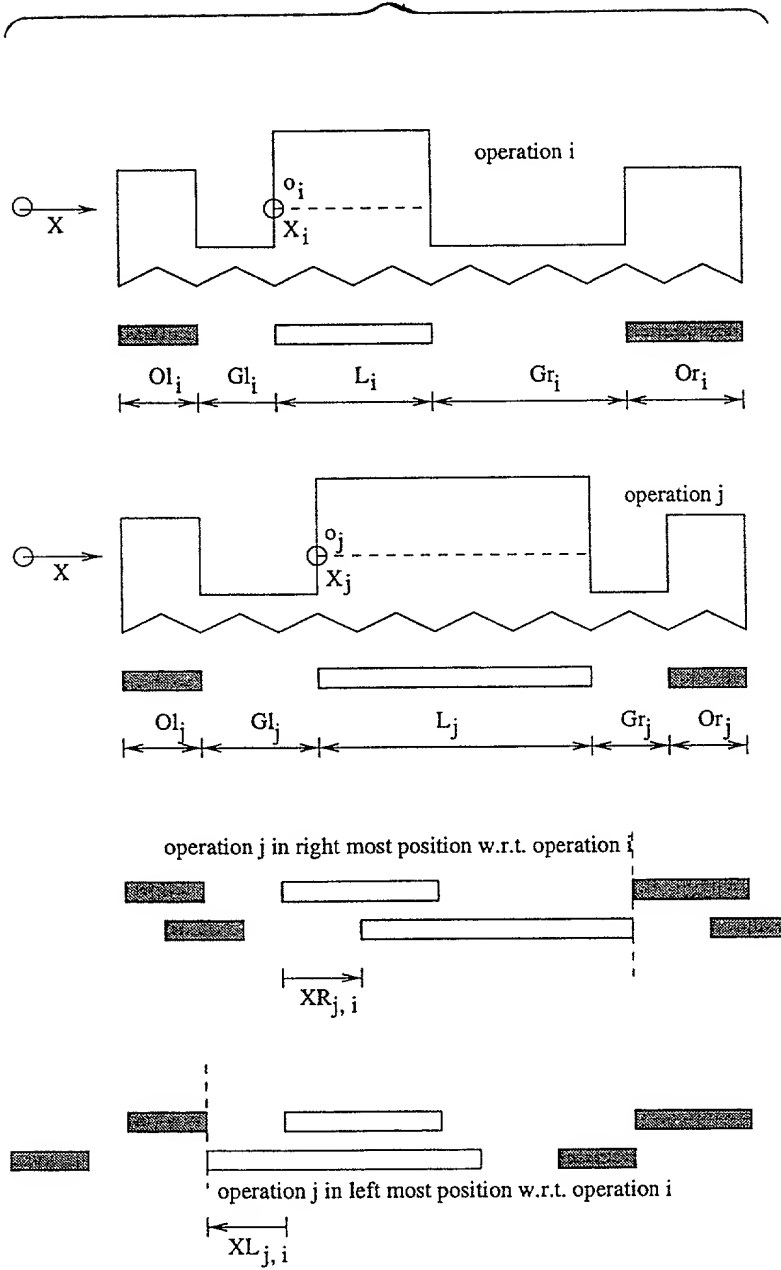
FIG. 11C

FIG. 12



Setup constraint parameters

# FIG. 13



Compatibility of setup constraints.

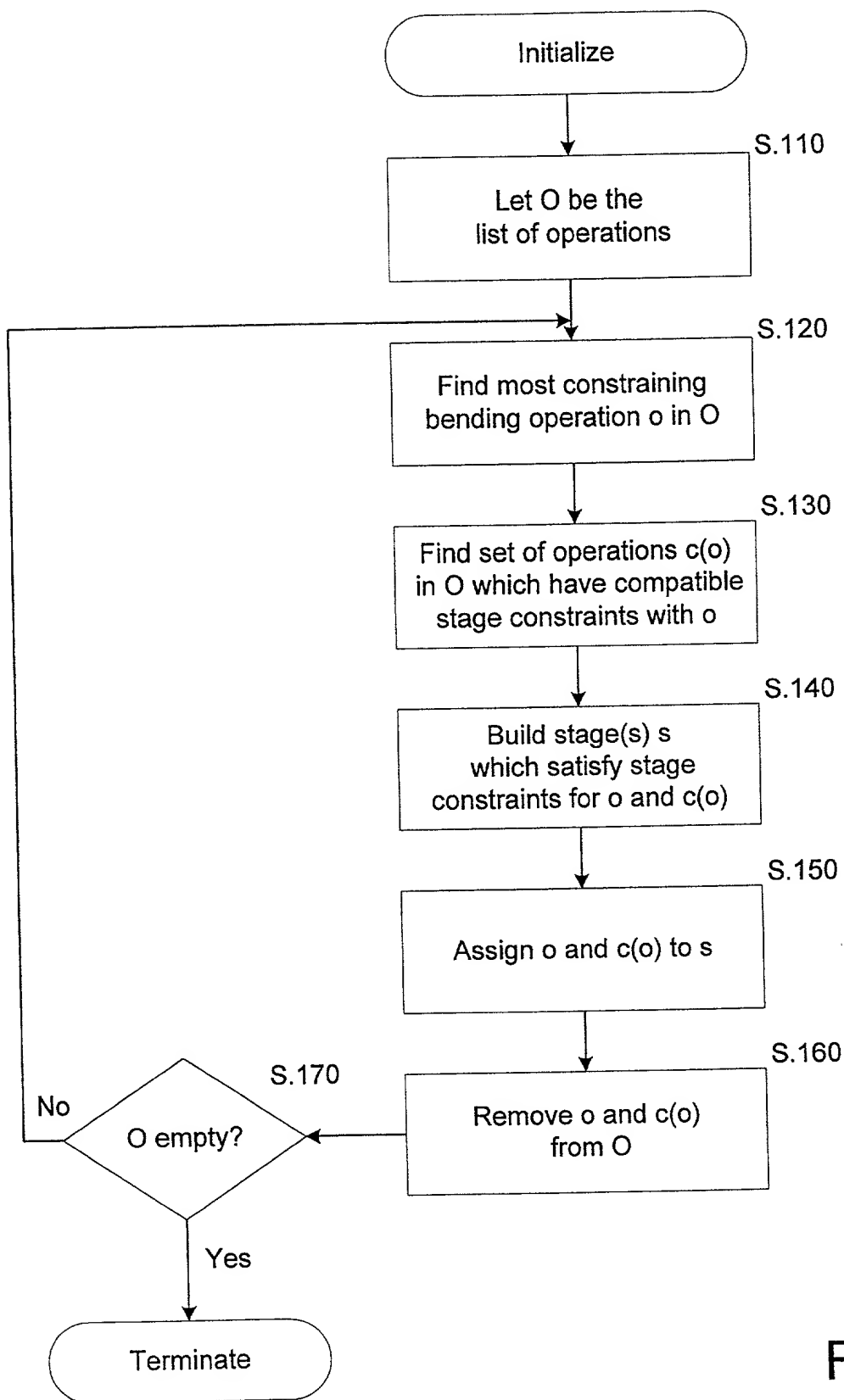
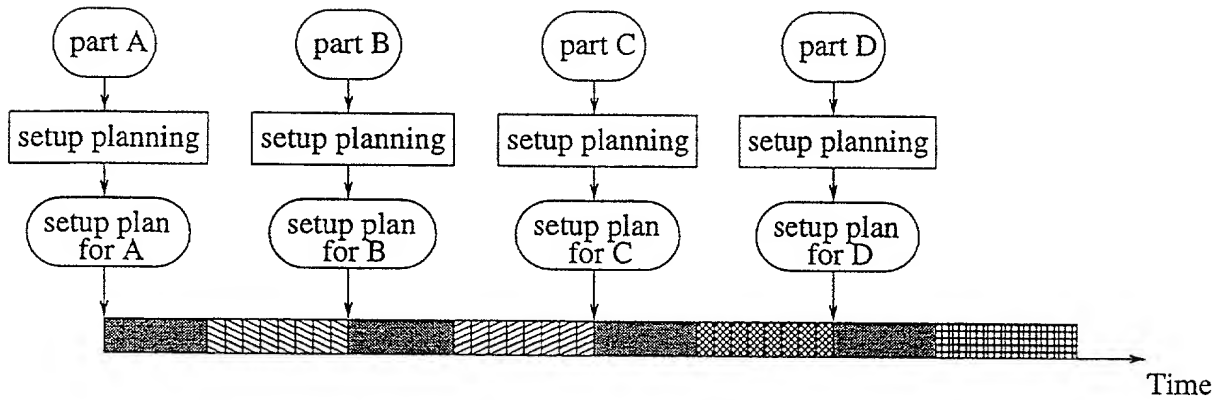


FIG. 14



# FIG. 15A (PRIOR ART)



# FIG. 15B

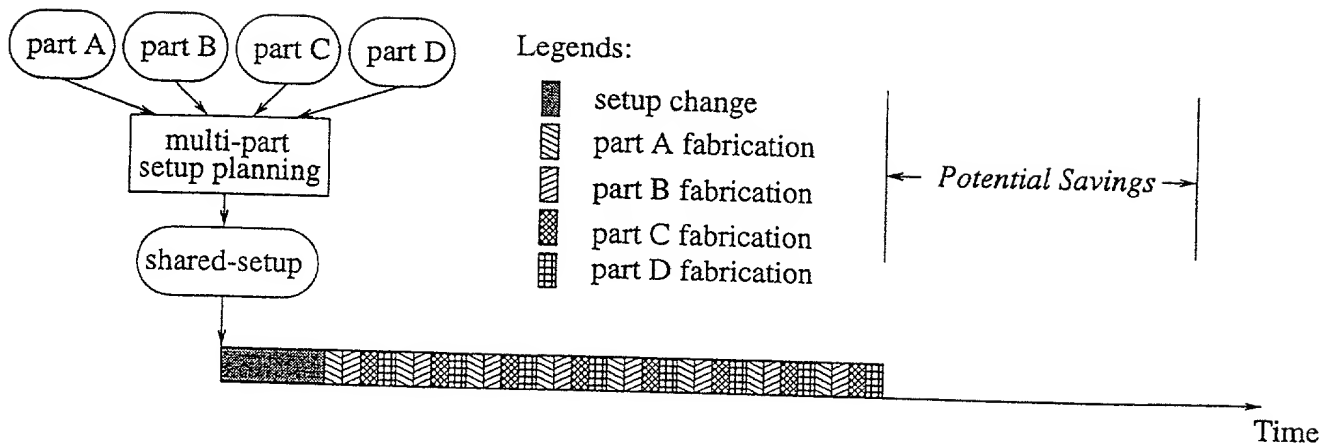


FIG. 16A

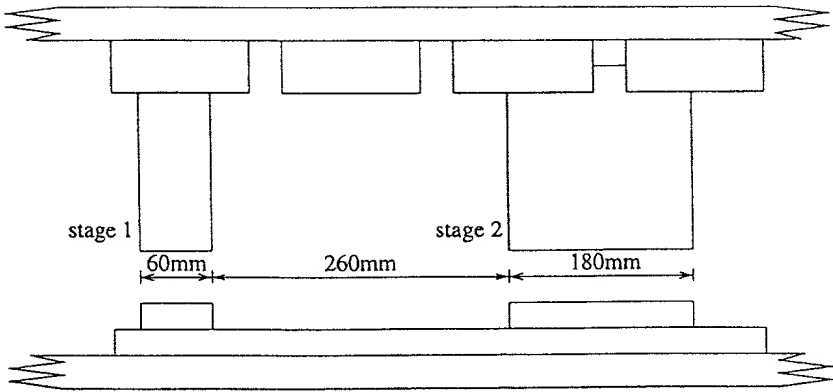


FIG. 16B

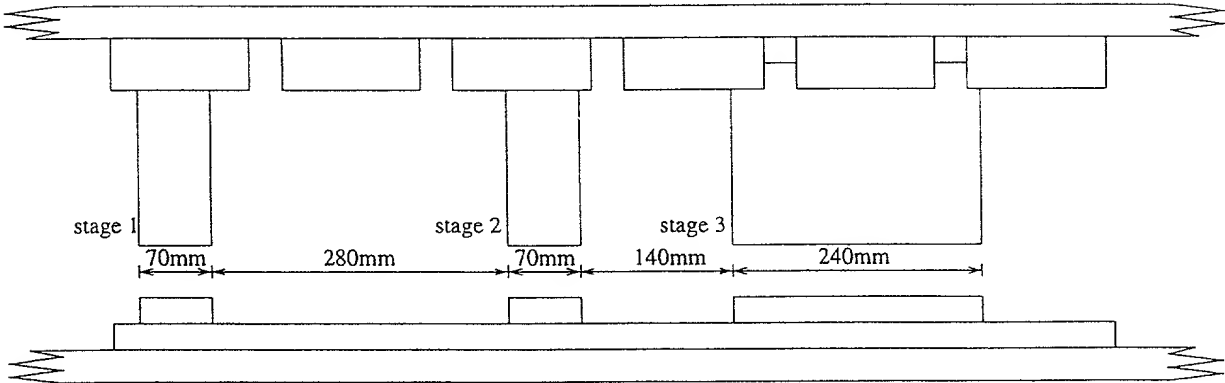


FIG. 16C

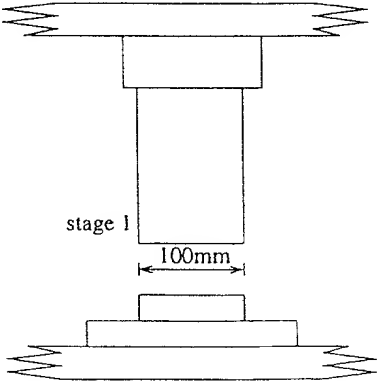
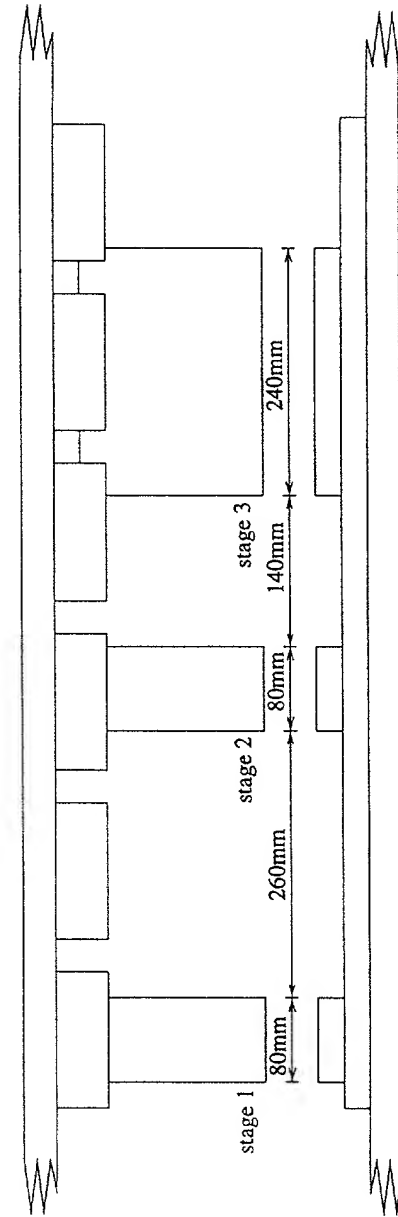


FIG. 17



Composite setup for all three parts